REMARKS

In the Final Office Action, the Examiner maintains his rejections to claims 1-3, and 5 under 35 U.S.C. § 103(a) as being unpatentable over BUFFAM (U.S. Patent No. 6,185,316) in view of KANEVSKY et al. (U.S. Patent No. 5,897,616), claim 4 under 35 U.S.C. § 103(a) as being unpatentable over BUFFAM (U.S. Patent No. 6,185,316) in view of KANEVSKY et al. (U.S. Patent No. 5,897,616) in view of FUJIMOTO (U.S. Patent No. 5,893,057), claims 6 and 7 under 35 U.S.C. § 103(a) as being unpatentable over BUFFAM (U.S. Patent No. 6,185,316) in view of KANEVSKY et al. (U.S. Patent No. 5,897,616) in view of GLAZE (U.S. Patent No. 6,320,974), claims 8-10 under 35 U.S.C. § 103(a) as being unpatentable over BUFFAM (U.S. Patent No. 6,185,316) in view of KANEVSKY et al. (U.S. Patent No. 5,897,616) in view SAWYER (U.S. Patent No. 6,324,271), claim 11 under 35 U.S.C. § 103(a) as being unpatentable over BUFFAM (U.S. Patent No. 6,185,316) in view of KANEVSKY et al. (U.S. Patent No. 5,897,616) in view of SAWYER (U.S. Patent No. 6,324,271) in view of FUJIMOTO (U.S. Patent No. 5,893,057), claims 12-15 under 35 U.S.C. § 103(a) as being unpatentable over BUFFAM (U.S. Patent No. 6,185,316) in view of SAWYER (U.S. Patent No. 6,324,271) in view of CHMAYTELLI (U.S. Patent No. 6,542,729) in view of WEISS (U.S. Patent No. 4,998,279), and claims 16-22 under 35 U.S.C. § 103(a) as being unpatentable over SAWYER (U.S. Patent No. 6,324,271) in view of KANEVSKY et al. (U.S. Patent No. 5,897,616) in view of WEISS (U.S. Patent No. 4,998,279).

By way of this Amendment, Applicant proposes canceling claims 12-15 without prejudice or disclaimer. Accordingly, claims 1-11 and 16-22 are now pending, with claims 1, 8, and 16 being the sole independent claims. No new matter is added by way of this response. Reconsideration and allowance of claims 1-11 and 16-22 in view of the following remarks are respectfully requested.

Rejections under 35 U.S.C. § 103

Claims 1-3, and 5 were rejected under 35 U.S.C. § 103(a) as being unpatentable over BUFFAM (U.S. Patent No. 6,185,316) in view of KANEVSKY et al. (U.S. Patent No. 5,897,616). Applicant respectfully traverses.

Independent claim 1 recites a method of validating a user for a transaction to be effectuated by using a transaction card. The method includes configuring a biometric profile for said user, the biometric profile including a plurality of biometric samples received from the user, where the plurality of biometric samples correspond to a plurality of questions. The biometric profile is associated with an indicium assigned to said transaction card. The user is biometrically interrogated when the transaction is attempted by the user, where the biometrical interrogation includes querying the user for a biometric response associated with a randomly selected one of the plurality of questions. The biometric response generated with respect to said user in response to the biometrical interrogation is monitored and it is determined if the biometric response matches a biometric sample in the biometric profile corresponding to the randomly selected one of said plurality of questions. If so, the user is approved for the transaction.

A proper rejection under 35 U.S.C. § 103 requires that three basic criteria be met. First, there must be some suggestion or motivation, either in the references themselves, or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest *each and every claim feature*. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not the applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). Applicant respectfully submits that the cited combination of BUFFAM and KANEVSKY et al. do not to disclose or reasonably suggest the combination of features recited in Applicant's claim 1.

For example, BUFFAM and KANEVSKY et al. do not disclose or suggest the feature of querying the user for a biometric response associated with a <u>randomly selected one of the plurality of questions</u>, as recited in claim 1. In particular, the Examiner admits that BUFFAM does not disclose or suggest querying the user for a response associated with a randomly selected one of the plurality of biometric samples (Final Office Action, pg. 4). The Examiner cites KANEVSKY et al. to remedy this deficiency. Applicant respectfully submits that KANEVSKY et al. likewise does not disclose or reasonably suggest the recited feature.

In making the rejection, the Examiner relied on col. 3, lines 28-44 of KANEVSKY et al. for allegedly disclosing matching voice samples taken from answers to random questions (Final Office Action, pg. 4). Moreover, in addressing Applicant's

prior remarks, the Examiner indicated that KANEVSKY et al. teaches determining if a biometric sample corresponds to the randomly selected question (Final Office Action, pg. 2). Applicant respectfully submits that this section of KANEVSKY et al. does not disclose or suggest querying the user for a response associated with a randomly selected one of the plurality of questions, where the questions correspond to a plurality of biometric samples stored in the user's profile, as required by claim 1.

At col. 3, lines 28-44, KANEVSKY et al. discloses:

> ...(d) querying the speaker with at least one random (but questions could be non-random) question (but preferably more than one random question) based on the information contained in the accessed database; (e) receiving second spoken word utterances of the speaker, the second spoken utterances being representative of at least one answer to the at least one random question; (f) decoding the second spoken utterance; (g) verifying the accuracy of the decoded answer against the information contained in the accessed database serving as the basis for the question; (h) taking a voice sample from the utterances of the speaker and processing the voice sample against an acoustic model attributable to the speaker candidate; (i) generating a score corresponding to the accuracy of the decoded answer and the closeness of the match between the voice sample and the model...

This section of KANEVSKY et al. discloses using random questions to elicit a user voice response that is then analyzed for accuracy and compared to an acoustic model attributable to the user. In analyzing the voice response for accuracy, the voice response is decoded and the decoded answer is compared to non-biometric or non-acoustic information stored in a database (see, e.g., col. 10, lines 18-52 and element 18 in Fig. 1). In comparing the voice response to an acoustic model, the voice response is processed against a predefined model that is *entirely unrelated to the random questions asked of the user*. In neither instance is a biometric response of a user compared to a biometric sample corresponding to a question randomly asked of the user. Consequently, KANEVSKY et al. teaches directly away from the invention as recited in independent

claim 1. Rather, KANEVSKY et al. clearly discloses that speaker recognition and authentication processes are performed independently, so as to allegedly increase the security of the disclosed system. Clearly, KANEVSKY et al. does not disclose eliciting a response associated with a randomly selected one of a plurality of questions *corresponding to a plurality of biometric samples received from the user during configuration.*

It should be noted that KANEVSKY et al. is silent with respect to the specific manner in which the acoustic model is generated. However, the generated model is clearly not the source for the randomly selected questions, since this is retrieved from an accessed database and is referenced as a non-acoustic database. Moreover, this section of KANEVSKY et al. clearly indicates that a single acoustic model is compared against the received sample and that the acoustic comparison is conducted separately from the accuracy portion of the analysis. Furthermore, KANEVSKY et al. discloses that conventional voice recognition (not voice authentication) is initially performed to determine question accuracy (see, e.g., col. 6, lines 34-65). Following an accuracy determination, the received sample is compared against a previously built user model (see, e.g., col. 6, line 66 – col. 7, line 14). Clearly, KANEVSKY et al. does not disclose eliciting a response associated with a randomly selected one of a plurality of questions, where the questions correspond to a plurality of biometric samples received from the user during configuration. For at least the foregoing reasons claim 1 is patentable over the cited combination of BUFFAM and KANEVSKY et al.

Claims 2, 3, and 5 depend from claim 1 and are therefore patentable over BUFFAM and KANEVSKY et al. for at least the reasons set forth above with respect to claim 1. Reconsideration and withdrawal of the pending rejections are respectfully requested.

Claim 4 was rejected under 35 U.S. C. § 103(a) as being unpatentable over BUFFAM in view of KANEVSKY et al. in view of FUJIMOTO et al. (U.S. Patent No. 5,893,057). Applicant respectfully traverses.

Claim 4 depends from claim 1. Applicant respectfully submits that the disclosure of FUJIMOTO et al. does not remedy the deficiencies of BUFFAM and KANEVSKY et al. as set forth above with respect to claim 1. Therefore, claim 4 is patentable over the cited combination of BUFFAM, KANEVSKY et al., and FUJIMOTO et al. for at least reasons similar to those given above with respect to claim 1.

Claims 6 and 7 were rejected under 35 U.S. C. § 103(a) as being unpatentable over BUFFAM in view of KANEVSKY et al., and further in view of GLAZE et al. (U.S. Patent No. 6,320,974). Applicant respectfully traverses.

Claims 6 and 7 depend from claim 1. Applicant respectfully submits that the disclosure of GLAZE et al. does not remedy the deficiencies of BUFFAM and KANEVSKY et al. as set forth above with respect to claim 1. Therefore, claims 6 and 7 are patentable over the cited combination of BUFFAM, KANEVSKY et al., and GLAZE et al. for at least reasons similar to those given above with respect to claim 1.

Claims 8-10 were rejected under 35 U.S. C. § 103(a) as being unpatentable over

BUFFAM in view of KANEVSKY et al. in view SAWYER et al. (U.S. Patent No.

6,324,271). Applicant respectfully traverses.

Independent claim 8 recites a method of validating a user for a call to be

effectuated over a Public Switched Telephone Network (PSTN) using a calling card. The

method includes configuring a personalized profile for said user, said personalized profile

including a plurality of voice samples elicited from said user in response to a plurality of

personalized questions directed to said user; associating said personalized profile with an

indicium assigned to said calling card; determining if a voice verification is needed with

respect to said user when said call is attempted by said user; if so, querying said user for a

voice response to a question that is randomly selected from said plurality of personalized

questions; verifying if said voice response matches a corresponding voice sample in said

voice profile; and if so, approving said user for said call involving said calling card. The

cited combination of BUFFAM, KANEVSKY et al., and SAWYER et al. do not disclose

or suggest the combination of features recited in claim 8.

For example, BUFFAM, KANEVSKY et al., and SAWYER et al. do not disclose

or suggest querying said user for a voice response to a question that is <u>randomly selected</u>

<u>from said plurality of personalized questions</u>, as recited in claim 8. In particular, the

Examiner admits that BUFFAM does not disclose or suggest querying said user for a

voice response to a question that is randomly selected from said plurality of personalized

questions (Final Office Action, pg. 6). The Examiner cites KANEVSKY et al. to remedy

this deficiency. Applicant respectfully submits that KANEVSKY et al. likewise does not disclose or reasonably suggest the recited feature.

In making the rejection, the Examiner relied on col. 3, lines 28-44 of KANEVSKY et al. for allegedly disclosing matching voice samples taken from answers to random questions (Final Office Action, pg. 6). Moreover, in addressing Applicant's prior remarks, the Examiner indicated that KANEVSKY et al. teaches determining if a biometric sample corresponds to the randomly selected question (Final Office Action, pg. 2). Applicant respectfully submits that this section of KANEVSKY et al. does not disclose or suggest querying said user for a voice response to a question that is randomly selected from said plurality of personalized questions, where the questions correspond to a plurality of voice samples stored in the user's personalized profile, as required by claim 8.

As recited above, col. 3, lines 28-44 of KANEVSKY et al. discloses using random questions to elicit a voice response from a user. The received voice response may then be separately analyzed for 1.) accuracy and 2.) its closeness to an acoustic model attributable to the user. As further evidenced at col. 10, lines 18-52, it would appear that the system of KANEVSKY et al. queries the user for information included within a database associated with the user. This database is constructed of non-acoustic information (see, e.g., element 18 in Fig. 1). An acoustic response to a presented question is compared against a separately generated acoustic model. The acoustic model does not correspond *in any way* with the question posed to the user for authentication. Rather, KANEVSKY et al. clearly discloses that speaker recognition and authentication

processes are performed independently, so as to allegedly increase the security of the disclosed system. Clearly, KANEVSKY et al. does not disclose eliciting a response associated with a from said plurality of personalized questions, where the questions correspond to a plurality of voice samples stored in the user's personalized profile.

It should be noted that KANEVSKY et al. is silent with respect to the specific manner in which the acoustic model is generated. However, the generated model is clearly not the source for the randomly selected questions, since this is retrieved from an accessed database and is referenced as a non-acoustic database. Moreover, this section of KANEVSKY et al. clearly indicates that a single acoustic model is compared against the received sample and that the acoustic comparison is conducted separately from the accuracy portion of the analysis. Furthermore, KANEVSKY et al. discloses that conventional voice recognition (not voice authentication) is initially performed to determine question accuracy (see, e.g., col. 6, lines 34-65). Following an accuracy determination, the received sample is compared against a previously built user model (see, e.g., col. 6, line 66 – col. 7, line 14). Clearly, KANEVSKY et al. does not disclose from said plurality of personalized questions, where the questions correspond to a plurality of voice samples stored in the user's personalized profile during configuration. For at least the foregoing reasons claim 8 is patentable over the cited combination of BUFFAM and KANEVSKY et al.

The disclosure of SAWYER et al. does not remedy the deficiencies of BUFFAM and KANEVSKY et al. For at least these reasons, claim 8 is patentable over the cited combination of BUFFAM, KANEVSKY et al., and SAWYER et al.

Claims 9 and 10 depend from claim 8 and are therefore patentable over the cited combination of BUFFAM, KANEVSKY et al., and SAWYER et al. for at least reasons similar to those given above with respect to claim 8.

Claim 11 was rejected under 35 U.S. C. § 103(a) as being unpatentable over BUFFAM in view of KANEVSKY et al., further in view of SAWYER, and still further in view of FUJIMOTO. Applicant respectfully traverses.

Applicant respectfully submits that the disclosures of SAWYER et al. and FUJIMOTO et al. do not remedy the deficiencies of BUFFAM and KANEVSKY et al. as set forth above with respect to claim 1. Therefore, claim 11 is patentable over the cited combination of BUFFAM, KANEVSKY et al., SAWYER et al., and FUJIMOTO et al. for at least reasons similar to those given above with respect to claim 1.

Claims 12-15 were rejected under 35 U.S. C. § 103(a) as being unpatentable over BUFFAM in view of SAWYER et al. in view of CHMAYTELLI et al. (U.S. Patent No. 6,542,729), and further in view of WEISS (U.S. Patent No. 4,998,279). Claims 12-15 have been canceled without prejudice or disclaimer by way of the above proposed amendment, thereby rendering the rejection of these claims moot.

Claims 16-22 were rejected under 35 U.S. C. § 103(a) as being unpatentable over SAWYER et al. in view of KANEVSKY et al., and further in view of WEISS. Applicant respectfully traverses.

Independent claim 16, as amended, recites an access control system for use with a transaction-card-based scheme. The access control system includes a network operable with a terminal, where the terminal interacts with a user in association with a transaction

card. A controller is disposed in the network to query the user when the user attempts a

transaction using the transaction card. A server is disposed in the network to respond to

messages from the controller with respect to querying the user. A profile database is

coupled to the server, the profile database having a plurality of biometric samples

inherently coupled to the user, where the plurality of biometric samples relate to a

plurality of questions, and where the biometric samples are associated with an indicium

assigned to the transaction card such that when the user attempts the transaction, the

controller queries the user for a response relating to a randomly selected one of the

biometric samples and if the response does not match a corresponding entry in the profile

database, access is denied to the user for the transaction. The cited combination of

SAWYER et al., KANEVSKY et al., and WEISS does not disclose or reasonably suggest

each and every feature of claim 16.

For example, SAWYER et al., KANEVSKY et al. and WEISS does not disclose

or suggest a controller that queries the user for a response <u>relating to a randomly selected</u>

<u>one of the plurality of biometric samples</u>, wherein the plurality of biometric samples

relate to a plurality of questions. The cited combination of SAWYER et al.,

KANEVSKY et al., and WEISS does not disclose or suggest this feature. The Examiner

acknowledged that SAWYER et al. does not disclose or suggest this feature and relied on

col. 3, lines 26-44 of KANEVSKY et al. for allegedly disclosing receiving spoken

answers in response to submitted questions, and verifying the user and the answers via a

biometric database (Final Office Action, pg. 9). Applicant respectfully submits that this

section of KANEVSKY et al. does not disclose or suggest a controller that queries the

user for a response relating to a randomly selected one of the plurality of biometric

samples, wherein the plurality of biometric samples relate to a plurality of questions, as

recited by claim 16.

As recited above, col. 3, lines 26-44 of KANEVSKY et al. discloses using

random questions to elicit a voice response from a user. The received voice response may

then be separately and independently analyzed for 1.) accuracy and 2.) its closeness to an

acoustic model attributable to the user. As evidenced at col. 10, lines 18-52,

KANEVSKY et al. discloses that its system queries a user for information included

within a non-acoustic database associated with the user. An acoustic response to a

presented question is then compared against a single separately generated acoustic model.

The acoustic model does not correspond *in any way* to the question posed to the user for

authentication. Rather, KANEVSKY et al. clearly discloses that speaker recognition and

authentication processes are performed independently, so as to allegedly increase the

security of the disclosed system. This section of KANEVSKY et al. does not disclose or

suggest a controller that queries the user for a response relating to a randomly selected

one of the plurality of biometric samples, wherein the plurality of biometric samples

relate to a plurality of questions, as required by claim 16.

In fact, as noted above, KANEVSKY et al. is silent with respect to the specific

manner in which the acoustic model is generated. However, the generated model is

clearly not the source for the randomly selected questions, since this is retrieved from an

non-acoustic user database. Moreover, this section of KANEVSKY et al. clearly

indicates that a single acoustic model is compared against the received sample and that

the acoustic comparison is conducted separately from the accuracy portion of the analysis. Furthermore, KANEVSKY et al. discloses that conventional voice recognition (not voice authentication) is initially performed to determine question accuracy (see, e.g., col. 6, lines 34-65). Following an accuracy determination, the received sample is compared against a previously built user model (see, e.g., col. 6, line 66 – col. 7, line 14).

KANEVSKY et al. does not disclose a controller that queries the user for a response relating to a randomly selected one of the plurality of biometric samples, wherein the plurality of biometric samples relate to a plurality of questions. The cited WEISS reference does not remedy the noted deficiencies with respect to the SAWYER et al. and KANEVSKY et al. references, as note above. For at least the foregoing reasons claim 16 is patentable over the cited combination of SAWYER et al., KANEVSKY et al. and WEISS. Accordingly, reconsideration and withdrawal of the rejection of claim 16 are respectfully requested.

Claim 17-22 depend from claim 16. Therefore, Applicant submits that claims 17-22 are patentable over SAWYER et al., KANEVSKY et al., and WEISS for at least the reasons given above with respect to claim 16.

CONCLUSION

While the present application is now believed to be in condition for allowance, should the Examiner find some issue to remain unresolved, or should any new issues arise which could be eliminated through discussions with Applicants' representative, the

Examiner is invited to contact the undersigned by telephone in order that the further prosecution of this application can thereby be expedited.

Applicant respectfully requests entry of the present amendment because the present amendment does not raise new issues or require a further searching of the art. Moreover, Application submits that the present amendment places the application in better condition for appeal should the Examiner contest the patentability of the pending claims.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 07-2347 and please credit any excess fees to such deposit account.

Respectfully submitted,

HARRITY SNYDER, L.L.P.

By: Robin C. Clark
Registration No. 40,956

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11350 Random Hills Road
Suite 600
Fairfax, Virginia 22030
(571) 432-0800